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NTC GREAT LAKES MEETING MINUTES
December 18, 2001
GREAT LAKES, IL

Attendees:	TtNUS	Navy SouthDiv	NTC Great Lakes
	Robert Davis	Anthony Robinson	Mark Schultz
		Paul Campbell	Dan Fleming
			Georgia Vlahos
			LT Craig Wolfe

1.0 Meeting and Introduction

1.1 Greeting and check in

1.2 Agenda is attached – the agenda was revised to discuss Site 17 first while Georgia was at the meeting. Site visits were conducted last.

1.3 Data tables that were submitted by e-mail were provided in hard copy form. The tables were not completely checked prior to submittal and the meeting so there will be some changes and the final version will be submitted after the first of the year. The checking that will occur will be units and conversions as well as number of exceedances for each criteria.

2.0 Site 17

2.1 **History/QAPP/Objectives** were discussed to provide an overview of the project. Reviewed sample locations and analysis that was completed. For Human Health Risk Assessment (HHRA), first screen vs. TACO to pick the COPCs. For Ecological Risk (ECORA), first compare to EDQLs, AWQS, and others to pick COPCs

2.2 **Surface Water Samples** – 6 samples collected – 4 in Pettibone Creek and 2 in the Boat Basin that corresponds to the sample locations as a sediment sample. The first review of the results indicate the following are possible COPCs:

- 3 VOCs (Bromodichloromethane, chloroform, TCE) exceeded the TACO Groundwater Tier I criteria. The samples were located on the north branch of Pettibone Creek
- 3 metals (Fe, Pb, Mn) exceeded the TACO Groundwater Tier I criteria. The maximum concentration occurred on the south branch of Pettibone Creek near the confluence with the north branch.
- IEPA has done a quick review of the tables and has requested that Ambient Water Quality Standards also be used. This will be added to the updated tables.
- ECORA – DDD, DDT, endosulfan, Cu, Hg, Pb, and Zn exceeded the surface water EDQLs. The results will be compared to other criteria such as the Ontario Ministry of the Environment, etc., and will be looked at in more detail to determine the COPCs.

2.3 **Boat Basin Surface Sediment (0 to 4 cm)** – 12 samples obtained

- HHRA – Polynuclear Aromatic Hydrocarbons (PAHs) of BaA, BaP, BbF, and Indeno exceeded the TACO residential ingestion criteria. Metals of As and Be exceeded the TACO residential ingestion criteria however As was less than the TACO background criteria for metropolitan areas. Most exceedances were at sample point 45 (where Pettibone Creek enters the Boat Basin).
- ECORA – Most of the PAHs, several pesticides, PCBs, and metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn) exceeded the EDQLs for sediments. Maximum concentrations occurred in a few different samples for different parameters, however sampling points 45 and 48 were locations exceedances occurred for more than 1 parameter.

2.4 **Boat Basin Depth Sediment** (1-3 ft, 3-6 ft, and 6-10 ft) – 36 samples obtained

- HHRA – PAHs (same as surface sediment), several pesticides, and PCBs exceeded the TACO residential ingestion criteria. Metals of As, Be, and Pb exceeded the TACO residential ingestion. Most exceedances were at sample points 45, 48, and 49.
- ECORA – Most of the PAHs, several pesticides, PCBs, and metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn) exceeded the EDQLs for sediments. Maximum concentrations occurred in sampling points 45, 48, and 56.

2.5 **Comparison of Boat Basin Surface to Depth samples – comparison based on maximum concentration (need to compare percentage of samples that exceed)**

- PAH Depth < PAH Surface

- Pesticides/PCBs Depth > Pesticides/PCBs Surface
- Metals Depth > Metals Surface

2.6 **Pettibone Creek Surface Sediment (0 to 4 cm)** – 38 samples
- HHRA – PAHs (same as Boat Basin) exceeded the TACO residential ingestion criteria. Metals of As and Be exceeded the TACO residential ingestion however As was less than the TACO background criteria for metropolitan areas. Most exceedances were at sample point 01.
- ECORA – Most of the PAHs, several pesticides, PCBs, and metals (As, Cd, Cu, Pb, Hg, Ni, Ag, Zn) exceeded the EDQLs for sediments. Maximum concentrations occurred in sampling points 01 and 19.

2.7 **Pettibone Creek Depth Sediment (1 ft)** – 14 samples
- HHRA – PAHs (same as surface sediment and pyrene) exceeded the TACO residential ingestion criteria. Metals of As, Be, and Pb exceeded the TACO residential ingestion. Most exceedances were at sample points 01 and 04.
- ECORA – Most of the PAHs, several pesticides, PCBs, and metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn) exceeded the EDQLs for sediments. Maximum concentrations occurred in sampling points 01, 04, and 18.

2.8 **Comparison of Pettibone Creek Surface to Depth samples – comparison based on maximum concentration (need to compare percentage of samples that exceed)**
- PAH Depth < PAH Surface
- Pesticides/PCBs Depth vs Pesticides/PCBs Surface – no general correlation/trend by this review but it will be looked at again.
- Metals Depth > Metals Surface

3.0 **Site 7**

3.1 **History/QAPP/Objectives** were discussed to provide an overview of the project. Reviewed sample locations and analysis that was completed. For Human Health Risk Assessment (HHRA), first screen vs. TACO to pick the COPCs. Ecological Risk (ECORA) is minimal because of the lack of habitat – paved parking area, however groundwater was compared to the EDQLs for surface water. Reconstruction for Building 1200 was proposed for January 2002.

3.2 **Groundwater** – 8 wells installed, 1 well was dry – wells have 10 ft screen intersecting the groundwater table from 3.5 to 13.5 ft bgs to 9 to 19 ft bgs.
- HHRA – No VOC or SVOC exceedances. Fe, Pb, Mn, and Tl exceeded TACO Tier I ingestion criteria. This will be looked at in more detail to determine if they will be COPCs. Several of the RCRA sites at the base are using the Class II criteria. TtNUS will also compare to the Class II criteria.
- ECORA - No VOC or SVOC exceedances. Cd, Co, Cu, Pb, Hg, Ni, Tl, and V exceeded the EDQLs for surface water. This will be looked at in more detail to determine if they will be COPCs.

3.3 **Surface Soil (0 to 1 ft)**
- HHRA – 4 PAHs (BaA, BaP, BbF, and DahA) exceeded the TACO residential ingestion criteria. Metals (As, Be, and Pb) exceeded the TACO criteria, however As was less than the TACO background criteria for metropolitan areas, Be concentrations were slightly higher that the TACO background criteria for metropolitan areas, and the maximum Pb concentration was 595 mg/kg compared to the 400 mg/kg criteria. Average Pb for the site was less than the criteria.
- ECORA – No habitat

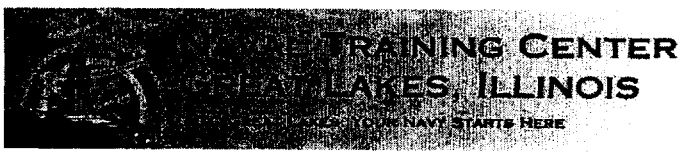
3.4 **Subsurface Soil (1 to 10 ft)**
- HHRA – 5 samples exceeded the BaP criteria and 1 sample exceeded some of the other PAH criteria. Metals (As, Be, Pb) exceeded the TACO criteria, however As and Be were less than the TACO background criteria for metropolitan areas and 1 sample exceeded the Pb criteria (maximum of 569 mg/kg). Average Pb for the site was less than the criteria.
- ECORA – No habitat

3.5 Summary for Site 7

- Area is paved. Exceedances are minimal.
- PAH exceedances could be related to the asphalt pavement at the site.
- TtNUS will also compare groundwater results to the Class II criteria (NTC Great Lakes request) and compare soil results to the Soil component of the Groundwater Ingestion criteria IEPA request).
- Conceptual site model will include recruits (12 week stay), maintenance/employees, and construction personnel as described in the QAPP.
- This site could be NFA. Navy and TtNUS to discuss with IEPA the possibility of doing a separate report for this site as a NFA site and do the RI/RA for Site 17 only.
- Area does not pose a problem for the reconstruction of Building 1200 based on these results.
- Discuss with IEPA the possibility of abandoning the wells based on the groundwater and soil results.

4.0 Site Visit for Site 17 - Toured Site 17 – started at the Boat Basin and finished with the south branch of Pettibone Creek.

GREAT LAKES NTC MEETING AGENDA



Attendees: Bob Davis – TtNUS
Anthony Robinson, Paul Campbell – Navy, SouthDiv Charleston
Dan Fleming, Mark Schultz – Navy, EFA West NTC Great Lakes

Dress: Casual
Location: Great Lakes NTC, First Floor Conference Room in Building 1 (tentative)

Tuesday, December 18, 2001

TIME	TOPIC	OBJECTIVE	LEAD
0830-0900	Check-in	Check-in	
0900-0930	Project Overview	Bring everyone up to speed on status/objectives	
0930-1000	Inorganic Criteria	Discuss Inorganic Criteria	
1000-1015	Break		
1015-1130	Site 7	Data Results – Groundwater and Soil – Impacts to construction related to Building 1200	
1130-1200	Site 7 Visit	Site 7 Visit – former RTC Silk Screening Shop	
1200-1300	Lunch		
1300-1330	Site 17 Visit	Site 17 Visit – Pettibone Creek and the Boat Basin	
1330-1445	Site 17	Data Results – Surface Water and Sediments	
1445-1500	Break		
1500-1530	Wrap Up	Questions	